



Agriculture and
Agri-Food Canada

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Assistant Deputy Minister (ADM) Research addresses a Chinese Crowd of Well Over 100,000 People

On November 1st, 2009, at the opening ceremony of the 16th China Agricultural High-Tech Fair held in Yangling, China, Dr. Marc Fortin, ADM Research, delivered a speech on behalf of all the international participants. Here is an overview:

The China Yangling Agricultural High-Tech Fair provides us with an opportunity to acknowledge the successes in science and innovation in China and around the world. Those progresses are making China and the world a better place to live. We are all facing the challenge to develop a more sustainable world to continue offering high

standards of living to future generations. Much work remains to be done to create an environment where new knowledge discovered by science can be transformed into innovative solutions and where science can better serve the needs of our societies.

This task is a collective one. An international dialogue between scientists, policy makers,

Canada

sociologists, economists and innovators is essential to create a rich environment that will favor the emergence of original solutions.

The world will need more from agriculture in the future and this will be an enormous challenge. A new dialogue amongst countries and players in science and innovation in agriculture will be imperative. This is one of many ambitious goals for us at this Fair. The world is counting on us to be innovative.



China Thanks Agriculture and Agri-Food Canada and the International Scientific Cooperation Bureau

On November 3rd, 2009, Dr. Yvon Martel, Chief Scientist – International, was awarded Honorary Professor at the Northwest Agriculture and Forestry University (NWA&FU) by President Wuxue Sun. This award was given to him to recognize his active role in promoting exchange and cooperation in agricultural S&T among universities from Canada and China, especially with NWA&FU. Dr. Martel is reknowned for his involvement in mentoring young scientists. After the ceremony, he was delighted to share his many years of experience in agricultural science with a room full of students. More information on:

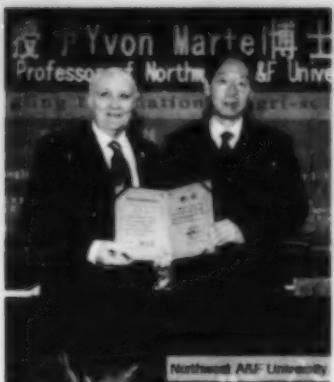
On September 2009, Dr. Johanne Boisvert, Director – Bilateral Relations, International Scientific Cooperation Bureau, received the Provincial “Sanqin Friendship” Award from Mr. Zhengyong Zhao, Vice-Governor of Shaanxi province. This award is to reward foreign experts that have contributed to the economic development of the province. *“There is no doubt in my mind that if I received this award this year, it is because of the energy, commitment and enthusiasm of primarily the ISCB team, and more especially Dr. Joe Zhou, Vice-Director for the China and Asia S&T relations and Mr. Shan He, Senior Officer for S&T international relations, but also of many Chinese colleagues”*, stated Dr. Boisvert. Indeed, the team, with the support of AAFC scientists and of the Canadian Embassy in China and Market and Industry Services Branch colleagues, has been very active in China over the last five years. Just in the Shaanxi province, ISCB has held several joint workshops, develop a China-Canada Science and Innovation Centre on arid and semid-arid climate, jointly organise a major China-Canada Forum with 24 universities and academies. Since 2005, the ISCB has yearly conducted a Canadian delegation (from industry, university, government) at the Yangling Fair S&T activities in Shaanxi province. A number of excellent young teachers and graduate students of the NWA&FU have also gone to various AAFC research centres to do advanced research and publish scientific papers.



Dr. Marc Fortin delivering his speech on behalf of all the international participants



The crowd at the opening ceremony of the 16th China Agricultural High-Tech Fair



Yvon Martel and Sun Wuxue



Johanne Boisvert and Zhengyong Zhao



Deans and Agriculture and Agri-Food Canada at l'Organisation de Coopération et de Développement Économiques and the European Commission

On October 15th, 2009, the Organization of the Canadian Faculties of Agriculture and Veterinary Medicine (CFAVM) with an AAFC representative, Dr. Yvon Martel, joined forces on an international mission to OECD Headquarters in Paris and to the European Commission

in Brussels. The mission was organized by the CFAVM's executive director, Dr. Doug Hedley, who led similar delegations to China in 2006 and 2009.

The proposal to meet with officials of OECD and the European Commission represented an occasion to explore the capacity for increased institutional arrangements in science, research, technology and innovation between Canadian and European universities and research institutions. Additionally, there were interests in examining ways in which long term partnerships can be enhanced between and among institutions in the above areas, as well as in training and education. AAFC is already a partner in these Canada-Europe linkages.

While many joint efforts have been undertaken and are still underway between researchers in Canadian and European universities, these relationships are mostly based on researchers and individual projects. These connections tend to cease when interest or project funding ends. Renewing such contacts on related or follow-up activities takes considerable time and effort. The critical issue is the establishment of more permanent institutional arrangements to form an umbrella for a wider and deeper range of collaboration over time.

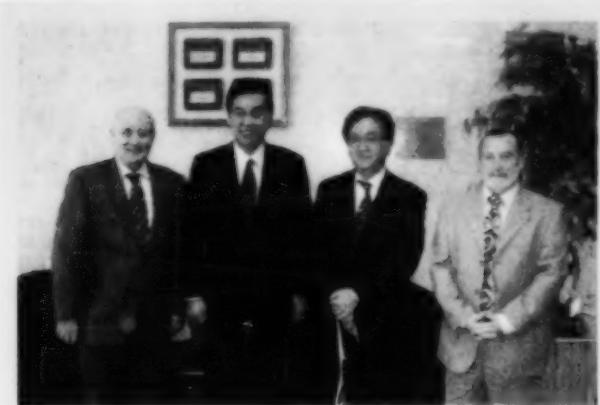
A component of this strategy is to tailor possible funding programs for both Canada and the European institutions to establish, encourage, and foster longer term arrangements. This would also enhance the educational experience for graduate and undergraduate students by providing resources to supplement research, technology and innovation research funding.



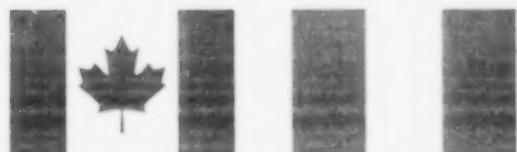
Japan Life Science Research Visiting Canada

Riken's Executive Director and Director of Global Relations Office from Japan visited Research Branch in Ottawa on October 28th, 2009. Riken is promoting strategic research and development to meet Japan and society's needs. They have 2,000 researchers publishing over 2,500 papers per year. Their research aims at applications on medicine and food production and at pioneering new domains of integrated science. Future priorities will focus on new super computer to be able to design new drugs (pharmaceuticals), the next generation of sequences moving into bio-nanotechnology. The future research will also focus on life science and on a new era of genome analysis; structural biology, computational science techniques for understanding and predicting

complex life phenomena and the strategic development of national key technologies such as analysis technology, bioinformatics, facilities and biological infrastructures. Even as a private research organization, Riken will be focusing its research on upstream science.



Dr. Yvon Martel, Chief Scientist, Yoshiharu Doi, Executive Director – Riken, Yasuaki Yutani, Director, Global Relations Office- Riken, Dr. Marc Savard, Research Manager



Canada-Italy Science and Technology Cooperation Forum on Agri-Food

On September 22nd, 2009, the AAFC International Scientific Cooperation Bureau and the Office of the Scientific Attaché of the Embassy of Italy in Canada jointly hosted the First Canada-Italy Science and Technology Cooperation Forum on Agri-Food. More than 50 participants representing Canadian universities including Carleton, Ottawa, Queen's and other federal departments and agencies including Statistics Canada, the Canadian Food Inspection Agency and the National Research Council as well as representatives from the industry, ERA-Can and several research centres of Agriculture and Agri-Food Canada attended this event.

The objective of the forum was to highlight the Italian and Canadian areas of excellence suitable to enhance the scientific cooperation for mutual benefits.

We were pleased to hear the honourable Excellency Ambassador Gabriele Sardo expressing the

importance of scientific cooperation between Canada and Italy in the context of the European Commission 7th Framework Programme.

The focus of the forum was on identifying scientific cooperation opportunities, presenting our respective national food programs, and on listening to the science conducted in micro-methodologies and fluorescence of nano-biosensors. As a result of the fruitful discussions, Canada and Italy have concluded that there are several opportunities for scientific cooperation. It includes:

1. Mobility of scientists and students
2. Sharing best practices in the area of technology transfer
3. Conducting research on food for health
4. Twin the ISA-NRC (Istituto di Scienze dell'Alimentazione – National Research Council) on Food Research with the Research and Development Centre of AAFC in Saint Hyacinthe
5. Support the cost initiative on nano-technologies
6. Pursue data collection in areas such as rural development
7. Sharing a list of existing projects on Food for Health

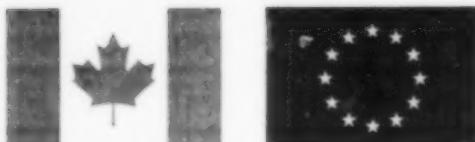
As the delegation from Italy and the AAFC representatives agreed on the conclusions and the next steps, a letter of intent (LOI) was signed between the Research Branch of Agriculture and Agri-Food Canada, represented by Dr. Yvon Martel, Chief Scientist - International, and the Department of Agri-Food of the National Research Council of Italy, represented by Dr. Mauro Gamboni, Director of Agri-Food Department. The LOI states that we will pursue the discussions and we will develop a framework in order to facilitate the exchange of personnel and foster scientific cooperation of mutual benefit.



Official photo of the participants at the Canada- Italy Science and Technology Cooperation Forum on Agri-Food



Signature of the Letter of intent (LOI) between the Research Branch of Agriculture and Agri-Food Canada and the Department of Agri-Food of the National Research Council of Italy



First Canada-European Commission Roundtable

On October 19th, 2009, more than 30 representatives from science based departments and agencies, namely, Agriculture and Agri-Food Canada, the Canadian Food Inspection Agency, the Public Health Agency of Canada, Health Canada, AFMNET and Officers from the European Commission attended the First Canada-European Commission Roundtable on "Food and Health".

The roundtable included comprehensives presentations on the ongoing European Commission KBBE-2020-4 call and initiatives to enhance cooperation between Canada and Europe such as the twinning concept and the ERA-Net scheme. Flash presentations from each participant opened the discussion on the opportunities for scientific cooperation between Canada, Europe and the world.

This activity was organized by the Canadian Contact Point for Food Agriculture, Fisheries and Biotechnologies under the Biocircle, an EC funded project.

This dialogue between the Canadian science based departments and agencies and the European Commission has been instrumental in

the commitment of each participant to a common effort to support joint actions aimed at enhancing scientific cooperation on both side of the Atlantic.

At the conclusion of this workshop, the role of science in support of policies and regulation was underlined by Mrs. Maive Rute, the newly appointed Director for the FAFB theme of the European Framework Programme. This perspective permitted to the participants to identify the upcoming Joint Agriculture and Agri-Food Canada/Canadian Institute of Food Science and Technology Conference (AAFC/CIFST) www.cifst.ca as an opportunity to develop a special workshop to discuss global issues such as health claims and to contribute to the openness of science between Canada, Europe and the world on global challenges.

This joint conference will see significant participation from the AAFC Canadian Food Network, science based departments and agencies, Canadian funding agencies and representative from the private sector interested in science, food and health. The conference will be held in Winnipeg, Manitoba, from May 31st to June 1st 2010.

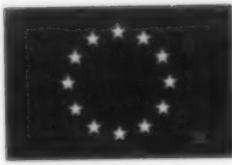


Official photo of the Canada/European Commission First National Roundtable on Food and Health



Food,
Agriculture and Fisheries,
and Biotechnology
Knowledge Based Europe (KBBE)





A "Second Twinning Workshop" on Food and Health, Food Safety and Related Science Issues

Agriculture and Agri-Food Canada was pleased to host the "Second Joint Canada-Europe Twinning Workshop" and extend the twinning possibilities to Canadian universities, networks and organizations. With the support of the European Commission, six project leaders visited Canada to meet with their counterpart to exchange on joint topics of interest and areas opened for cooperation under the theme Food and Health, Food Safety and related sciences issues. The organization of this workshop came along following the positive feedbacks of the researchers involved in the first "Food and Health" twinning initiative held in Brussels in October 2008.

This year, the scope was enlarged to include not only food and health but also food safety and related science issues. The participation to the workshop was also extended to other relevant Canadian networks (Advanced and Food Material Network, AFMNet) and the Public Health Agency of Canada. Participants were also asked to go beyond the scope of their specific project and identify new ideas for collaboration in their field of work. The workshop started with scoping presentations on existing mechanisms for international cooperation between Canada and EC. Main priorities for food research at AAFC and the EC were then highlighted. Specific oral presentations of the European and Canadian projects as well as research activities in similar fields followed in six modules:

EC: TORNADO (Molecular Targets Open for Regulation by the gut flora – New Avenues for improved Diet to Optimize European health) / **Canada:** Linkages between dietary fibre and human health;

EC: BASELINE (Selection and improving of fit-for-purpose sampling procedures for specific foods and risks) / **Canada:** Mitigating dissemination of bioterrorism agents in Canadian food systems & Ecology of human enteric pathogens in fresh horticultural products;

EC: BIOCLAIMS (Biomarkers of Robustness of Metabolic Homeostasis for Nutrigenomics-derived Health CLAIMS Made on Food) / **Canada:** Establishing a Cellular and

Animal Model Platform for Studying the Molecular Basis for Health Benefits of Agri-food Products (APP);

EC: ATHENA (Anthocyanin and polyphenol bioactives for Health Enhancement through Nutritional Advancement) / **Canada:** AAFC Anthocyanins and Phenolics Group – Research Expertise and Programs;

EC: BIOHYPO (Confronting the clinical relevance of biocide induced antibiotic resistance) / **Canada:** AAFC Food Safety Research: Antimicrobial Resistance & Alternatives;

EC: NANOLYSE (Nanoparticles in Food : Analytical methods for detection and characterisation) / **Canada:** Biocaptor generic template for detection of pathogens, allergens and other entities of food safety concern.

Furthermore, the National Food and Bio-Materials Research Network, AFMNet, of the National Science and Engineering Research Council (NSERC) National Center of excellence (NCE) Program, was presented by its director, Dr. Rickey Yada.

After the presentations, the EC and Canadian science leaders working on similar projects had private discussions to evaluate possibilities for cooperation and later shared with the group the results of their discussions. Many possibilities were identified. Among them, there is exchange of information, invitations to project meetings, exchange of procedures, methods, samples, data, students and visiting scientists.

The workshop was very successful and will undoubtedly lead to further collaboration. It allowed to deepen further the discussions and to elaborate more on the mechanisms. Progress achieved within the next months will be monitored closely.

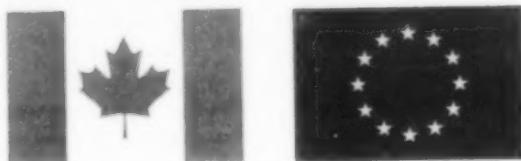
At the closure of the workshop, we were pleased to hear Dr. Gilles Saindon, Director General of the Science Centres Directorate at AAFC, expressing his satisfaction for this initiative that is focused on international scientific cooperation. Furthermore, he reiterated his commitment to support international initiatives such as the "Twinning concept" in order to maintain a tradition and a legacy of leveraging research, a key element for the advancement of science and for the success of Canada on the international scene.

For more information please visit:

<http://www.afffc.gc.ca>



Participants of "Twinning Workshop" on Food and Health Food Security and related science issues"



Info Day on the Seventh Framework Programme

On October 23rd, the AAFC International Scientific Cooperation Bureau in collaboration with the Biocircle Project (www.biocircle-project.eu) and the European Commission held an information day on the ongoing KBBE-2010 call for proposal of the Seventh Framework Programme (FP-7). This event, held at the AAFC Food Research and Development Centre in Saint-Hyacinthe, was attended by more than 40 research scientists from different organizations: Université de Montréal, Concordia University (Montreal), Université Laval (Quebec), Carleton University (Ottawa); AAFC research centres from Saint Hyacinthe, Sainte Foy, Saint Jean sur Richelieu and Lennoxville, Quebec and the Eastern Cereal and Oilseed Research Centre (Ottawa) as well as representatives from the Ministère du développement économique, de l'innovation et des exportations of the Province of Quebec, and the private sector.

The event brought together for the first time Canadian research stakeholders, European Commission Officer, Biocircle Project Managers and Canadian research funding organizations and Agencies (both federal and provincial) to provide information and to discuss co-operation mechanisms and opportunities within the scope of the Food, Agriculture and Fisheries and Biotechnology Theme. This event included a general

introduction of the European Commission 7th Framework Programme with presentation of the main features and areas addressed by the KBBE 2010 call. http://cordis.europa.eu/tp7/kbbe/home_en.html

When closing the event, Dr. Yvon Martel, Chief Scientist – International, thanked the participants who came from numerous regions of Eastern Canada to discuss and embark on new avenues for scientific cooperation in a coordinated manner on Canadian research capacity on the world scene. Moreover, Dr. Martel underlined the dedication of the European Commission Officer.

Dr. Valerie Rolland and the Biocircle Project Managers, Mr. Ben Kubbinga from the Agency for the Promotion of European Research (APRE) in Rome (Italy) and Dr. Dora Groo from the Hungarian Foundation for Science and Technology in Budapest (Hungary), who have engaged time and efforts in making this event possible.

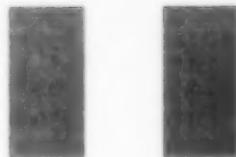


Official photo of the "First Canadian info Day on the Seventh Framework Programme"



Food,
Agriculture and Fisheries,
and Biotechnology
Knowledge-Based Bio-Economy (KBBE)





AAFC's Participation at the 2nd World Seed Conference Held in Rome in September 2009

The 2nd World Seed Conference was held on September 8–10, 2009, under the theme "Responding to the challenges of a changing world: the role of new plant varieties and high quality seed in agriculture". This conference was jointly organized by the Food and Agriculture Organization (FAO), Organisation for Economic Co-operation and Development (OECD), the International Seed Federation, the International Union for the Protection of New Varieties of Plants (UPOV) and the International Seed Testing Association (ISTA).

The conference began with a two-day expert forum intended to facilitate discussion on encouraging the development of new plant varieties, as well as the production and distribution of high quality seed in order to meet the demands of a changing world. The issues considered ranged from multilateral negotiations and mechanisms on plant genetic resources to seed treatment practices, as well as the importance of intellectual property rights and public/private partnerships in seed systems.

A policy forum followed to review the conclusions of the expert forum on means to provide an enabling environment that encourages the development of new plant varieties and the production and distribution of high quality seed. Participants found that urgent measures should be taken by governments and that private and public investment in the seed sector is necessary in order to ensure that agriculture can meet the challenges of food security in the context of increasing population and climate change.



Zewdie Bishaw, Head, Seed Section, International Centre for Agricultural Research in the Dry Areas; Andréanne Léger; Michael Larinde, Senior Agricultural Officer (Seed Production), Plant Production and Protection Division (AGP), Agriculture and Consumer Protection Department, FAO; Trudy Werry, Manager, Public Security Projects, Canadian Food Inspection Agency; and Samuel Kugbei, Chief technical advisor, Afghanistan Seed project, FAO